

Applicant

L&M Masonry- Dennis Lang
708 7th Street
Madison Lake, MN 56063

Owner

Stephen Woehrle
22374 Lakeview Hills Road
Madison Lake, MN 56063

Request and location

Request for a conditional use permit to cut and fill in a bluff zone for the purpose of stabilizing a slope to protect an existing dwelling. Said request is located in the Shoreland Overlay District of Madison Lake and the Conservation District in the Northeast Quarter of the Southwest Quarter of Section 02, LeRay Township.

Legal Description

Part of the Northeast Quarter of the Southwest Quarter of Section 02, LeRay Township (T-108-N, R-25-W).

Zoning

Conservation & Shoreland-Overlay Districts

General Site Description and Project Proposal

The 1.80 acre parcel is developed with an existing dwelling, deck, retaining walls, a concrete parking pad, and a tennis court. and is mostly grass lawn with some wooded areas. The southern, lake side of the lot is bordered by a wide bluff with approximately 40 feet of elevation change from the surrounding lawn to the lake.

The dwelling was constructed in 1981, prior to the adoption of the County Shoreland Ordinance in 1991. The dwelling is in the bluff impact zone (20 feet from the top of the bluff) and was designed with a walk-out basement cut into the face of the bluff. Retaining walls constructed of railroad ties extend down the face of the bluff to the south of the dwelling and a deck extends onto the bluff from the walk out basement. Stairs on the east end of the deck lead up to the surrounding landscape near the garage. An existing, dilapidated stairway extends from the deck to the lake, the proposal does not show the stairs connecting to the new patio. Runoff from roofs and downspouts and footing tiles are all directed to the bluff.

The bluff area adjacent to the dwelling failed in 2014 following heavy rains in the month of June. The area is currently unstable and a potential hazard. To ensure any repairs or attempts to stabilize the bluff will protect the structure and minimize erosion, County staff required the owners to provide engineered plans for stabilizing the bluff.

The engineer's plans for stabilizing the slope include removing the existing deck, removing loose soil and vegetation in the area of the patio, installing footings and a retaining wall to form a suitable base, backfilling with sand, and finishing with a concrete patio surface. See attachments A-10 and A-11 for the detailed plans and project narrative.

New concrete sidewalks and stairs are proposed, including a 4 foot wide concrete sidewalk leading from the rear of the garage to stairs leading down to the east end of the concrete patio and a 4 foot 6 inch wide concrete sidewalk leading from the west end of the house to new stairs

leading down on the west side of the new concrete patio. The proposed concrete patio, concrete sidewalks and additional stairs on the west end of the patio will increase impervious surfaces in the bluff impact zone. County staff recommends the site plan be revised to show no increase in impervious surfaces in the bluff impact zone.

Roof gutters and the patio drain will be collected into a 4 inch drain tile and routed to the bottom of the slope to minimize future erosion on the slope. A rock bed outlet will be established at the drain tile outlet to absorb the energy from drainage water to prevent scouring at the base of the slope. The final location of the rock bed outlet was not shown on the submitted plans other than it will be at the bottom of the bluff near the lake. This area could be wetlands. Wetlands have been delineated at the highest known water level of Madison Lake (1018.98ft) on other parts of Madison Lake, many of the lower portions of the property are below or near that elevation.

A condition has been added to this request to require a wetland delineation and submittal of more specific design plans for the rock bed outlet prior to the start of construction on the proposal.

Project Outcome

If approved, the conditional use permit will allow for cutting and filling in the bluff impact zone in order to establish a retaining wall and concrete patio, as shown in the attached plans.

Land Use Plan

If properly constructed, the proposal is consistent with the goals and policies established in the Blue Earth County Land Use Plan.

Existing Land Use, ½ Mile

North: Multiple residences, Lake View Road, a public boat landing, and Madison Lake.

East: One residence, Bray Park, Lake View Road, and cropland.

South: Madison Lake

West: Multiple residences and Madison Lake.

Road Access

Existing road access is from a shared gravel driveway accessing Lake View Hill Road. No changes in access are proposed.

Natural Resources Information

Area Water Features

The south property line runs along the shoreline of Madison Lake, a recreational lake.

Topography

The area north of the house is relatively flat. A large bluff runs east-west across the portion of the property immediately south of the existing house. See attachment A-5.

Floodplain

According to the 2011 FEMA Preliminary Flood Maps the proposal is not located within floodplain. See attachment A-6.

Shoreland

The proposal and associated property are located entirely within the shoreland overlay district of Madison Lake. See attachment A-7.

Township Review

According to an email dated April 15, 2015, Karyn Block, the LeRay Township Clerk, indicated that the township board approved the plans for replacing the deck and had no problems with the proposal.

Environmental Health Staff Comments

See attachment A-8.

Department of Natural Resources Review

Minnesota Department of Natural Resources (DNR) Area Hydrologist Dan Girolomo recommends the concrete patio be constructed in a new location to meet the bluff setback requirements. Mr. Girolomo proposed the potential patio could be constructed on the west side of the existing dwelling instead of in connection with the walkout in the bluff and bluff impact zone.

Applicable Sections of the County Code of Ordinances:

Sec. 24-304 Erosion Control

(c) *Development of bluff zones and steep slopes.*

- (1) All development shall conform to the natural limitations presented by the topography and soil as to create the best potential for preventing soil erosion.
- (2) No structure shall be erected in any bluff zone as defined in this chapter. Essential services shall be exempt from this restriction.
- (3) Filling or cutting activity in any bluff zone shall be considered a conditional use. In no case shall cutting or filling be allowed for the purpose of establishing a site for the erection of a structure.
- (4) No structure shall be erected within 30 feet of the top of a bluff. If the adjacent bluff is actively eroding, the Zoning Administrator may increase the setback requirement.
- (5) Development on steep slopes with a grade between eight to 18 percent shall be carefully reviewed to ensure adequate measures have been taken to prevent erosion, sedimentation and structural damage.

(d) *Erosion and sediment control.*

- (1) Erosion and siltation control measures shall be coordinated with the different stages of development. Appropriate control measures shall be installed prior to development when necessary to control erosion. The county may require a stormwater drainage and erosion control plan by a certified registered professional engineer.

Standards for Granting a Conditional Use Permit Section 24-47 (f) (1) items a through o of the Code of Ordinances) Staff believes the request will meet the following standards required for the granting of a conditional use permit:

- a. That the proposed bluff stabilization conforms with the county land use plan.
- b. The applicants have demonstrated need for cutting and filling in the bluff impact zone to protect an existing legal, non-conforming structure.
- c. That the proposed use may prevent further degradation of water quality of the county.
- d. That the proposed use will not adversely increase the quantity of water runoff.
- e. That an engineer has certified that soil conditions are adequate to accommodate the proposed use.
- f. That the proposed use does not create a potential pollution hazard.
- g. That an engineer has certified that adequate drainage and other necessary facilities have been or are being provided to protect the structure and bluff from failure.
- h. (N/A) That adequate measures have been or will be taken to provide sufficient off-street parking and loading space to serve the proposed use.
- i. That facilities are provided to eliminate any traffic congestion or traffic hazard which may result from the proposed use.
- j. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted.
- k. That the establishment of the conditional use will not impede the normal and orderly development and improvement of surrounding vacant property for predominant uses in the area.
- l. (N/A) That adequate measures have been or will be taken to prevent or control offensive odor, fumes, dust, noise and vibration, so that none of these will constitute a nuisance, and to control lighted signs and other lights in such a manner that no disturbance to neighboring properties will result.
- m. (N/A) That the density of proposed residential development is not greater than the density of the surrounding neighborhood or not greater than the density indicated by the applicable zoning district.
- n. (N/A) That the intensity of proposed commercial or industrial development is not greater than the intensity of the surrounding uses or not greater than the intensity characteristic of the applicable zoning district.
- o. That site specific conditions and such other conditions are established as required for the protection of the public's health, safety, morals and general welfare.

RECOMMENDATION

Staff recommends **approval** for Conditional Use Permit PC 07-15 permit to cut and fill in a bluff zone for the purpose of stabilizing a slope to protect an existing dwelling contingent upon the following conditions:

1. That the proposed bluff alteration conforms to the site plan attached to this report (PC 07-15) and on file in the Blue Earth County Environmental Services Department.
2. That the proposal shall be revised to allow no increase in impervious surfaces in the bluff and bluff impact zones.
3. That a wetland delineation be performed on the portions of the property located below 1024 feet MSL on the property to determine if any wetlands exist in the vicinity of the proposed rock bed outlet.

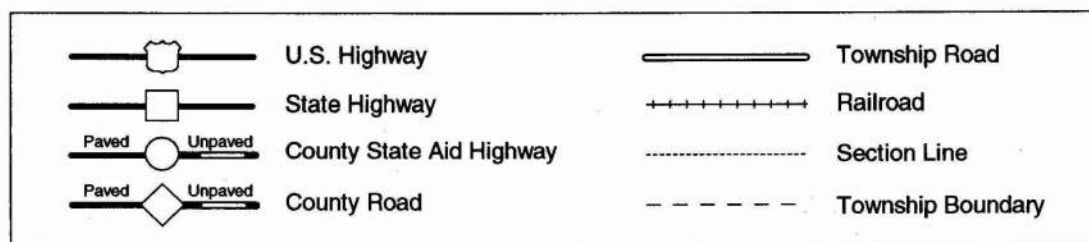
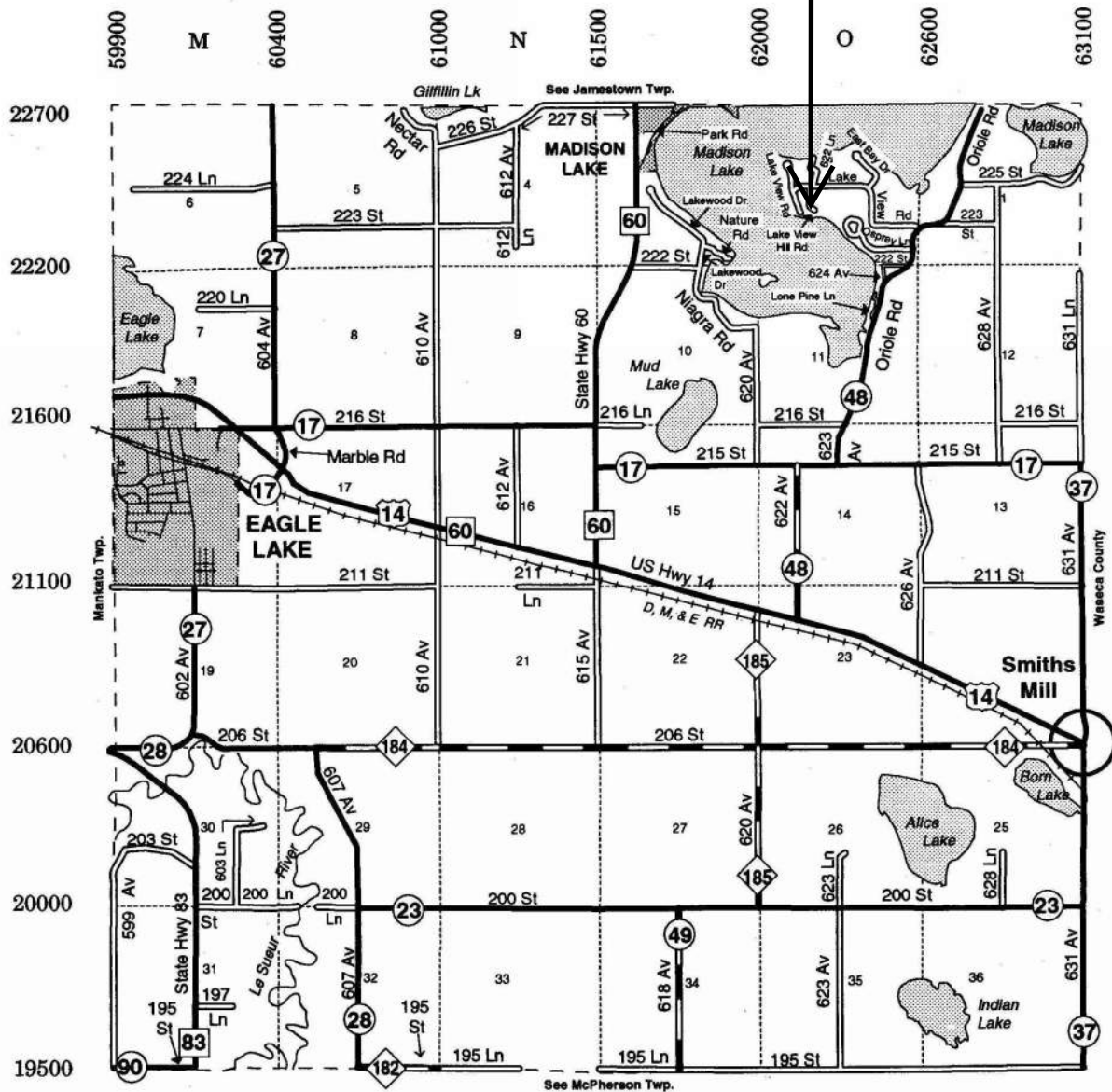
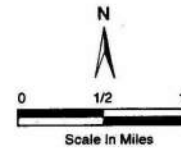
4. That, following a wetland delineation, a detailed plan for the proposed rock bed outlet be submitted showing the location, dimension, amount and type of materials to be used, and anticipated water handling capacity and maintenance plan. Submitted plans shall be reviewed and approved by the County Zoning Administrator prior to commencement of construction activities.
5. That grading or filling in any wetland must be undertaken in accordance with the rules of the Minnesota Wetlands Conservation Act, Minn. Stats. chs. 103A-103G.
6. That adequate methods must be utilized which minimize soil erosion and trap sediments before they reach any surface water feature.
7. That existing vegetation shall be maintained on the bluff and in the bluff impact zone. Existing vegetation enhances the stability of the bluff and preserves existing vegetation screening of structures as viewed from Madison Lake.

Attachments

- A-1 General Location Map
- A-2 Site Aerial Image
- A-3 Site Plan- Existing Deck
- A-4 Site Plan- Approx. Patio
- A-5 Topography Map
- A-6 Floodplain Map
- A-7 Shoreland Map
- A-8 Environmental Health Review
- A-9 Deck Photos
- A-10 Design Plans
- A-11 Design Narrative

T 108 N - R 25 W

Location of Proposed CUP

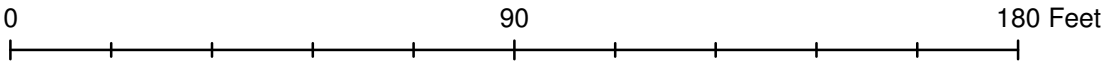


A-2 Site Aerial Image

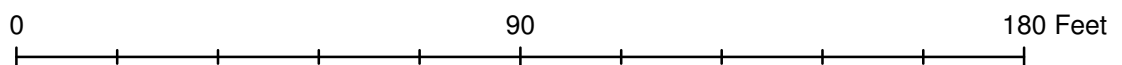


0 290 580 Feet

A-3 Site Map- Existing Deck



A-4 Site Map- Proposed Patio



A-6 Site Topography Map




 Parcel

Elevation Contour

 Index (10 Ft)

 Intermediate (2 Ft)

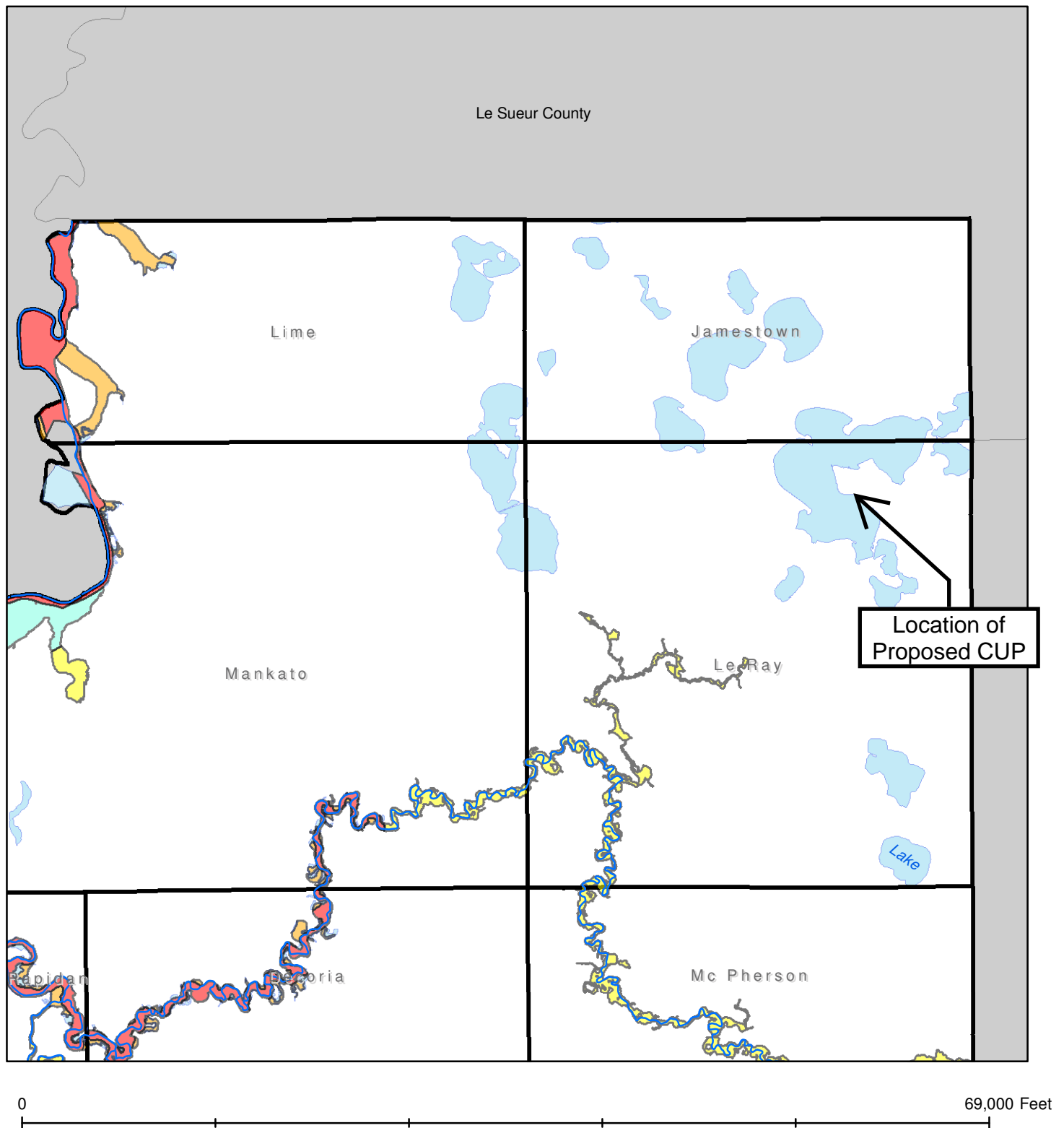
0 20 40 80 Feet




Source: Contours - MN LiDAR 2012

Disclaimer: This map was created using Blue Earth County's GIS and was created for specific internal County uses. It is intended to be used for reference purposes only and does not represent a land survey. No liability is assumed for the accuracy of the data delineated herein, either expressed or implied by Blue Earth County or its employees.

A-6 Floodplain Map
Preliminary Flood Insurance Rate Map
April 20, 2011 Draft Data



Special Flood Hazard Area

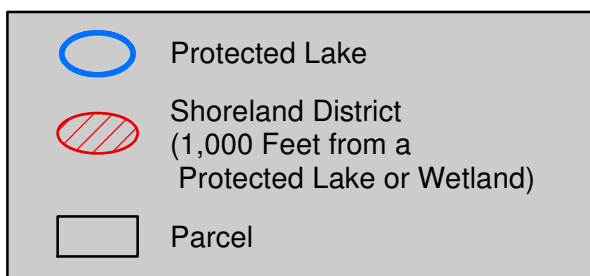
- Zone AE - Floodway
- Zone AE
- Zone A - No Base Flood Elevations

Other Flood Areas (Zone X)

- 0.2 PCT ANNUAL CHANCE FLOOD HAZARD
- PROTECTED BY LEVEE



Attachment A-7 Location of Shoreland Districts



0 500 1,000 Feet



Prepared By: Blue Earth County
Environmental Services
May 2015

Source: County Aerial Photo - 2013

A-8 Environmental Health Review

BLUE EARTH COUNTY ENVIRONMENTAL SERVICES

Government Center, 410 South Fifth Street
P.O. Box 3566, Mankato, Minnesota 56002-3566

Phone: (507) 304-4381 Fax: (507) 304-4431

Environmental Health Section - Planning Application Reviews

Date Printed:	May 27, 2015	Permit Number:	PL2015016
Property Owner:	WOEHRLE STEPHEN L	Applicant:	L&M MASONRY - DENNIS LANG
Parcel Number:	R39.10.02.326.015	File ID:	PC 07-15

Application Description: Request for a conditional use permit to cut and fill in a bluff zone for the purpose of stabilizing a slope to protect an existing dwelling. Said request is located in the Shoreland Overlay District of Madison Lake and the Conservation District in the Northeast Quarter of the Southwest Quarter of Section 02, LeRay Township.

Septic Review

Status: Complete - Comments Received

Comments: This property is located in an area serviced by municipal sewer. No additional information needed. Anderson, Jesse 05/27/2015 10:56 AM

Well Review

Status: Complete - Comments Received

Comments: There is no site plan showing the location of the existing in-use well. The property has had a house since 1981. A review of the County and State well records does not reveal any well information. As long as the well is not located in the area proposed to be included in the construction area this proposed project should not have a negative impact to the known well status on this property. grant 05/27/2015 11:21 AM

Wetland Review

Status: Complete-Condition Required

Comments: Most of the proposed construction is located at or near the bluff next to the existing house foundation. This portion of the proposed project does not appear to negatively impact any known or suspected wetlands which may exist on this property. There is an energy dissipation rock bed design with this project that extends down the existing bluff. There is no elevation data identified on the engineered plans, however, if this energy dissipation rock bed is at or below the 1024 elevation then the project should have a wetland delineation conducted and reviewed by the County as a condition of this permit approval. grant 05/27/2015 1:30 PM

A-9 Woehrle Deck Photos

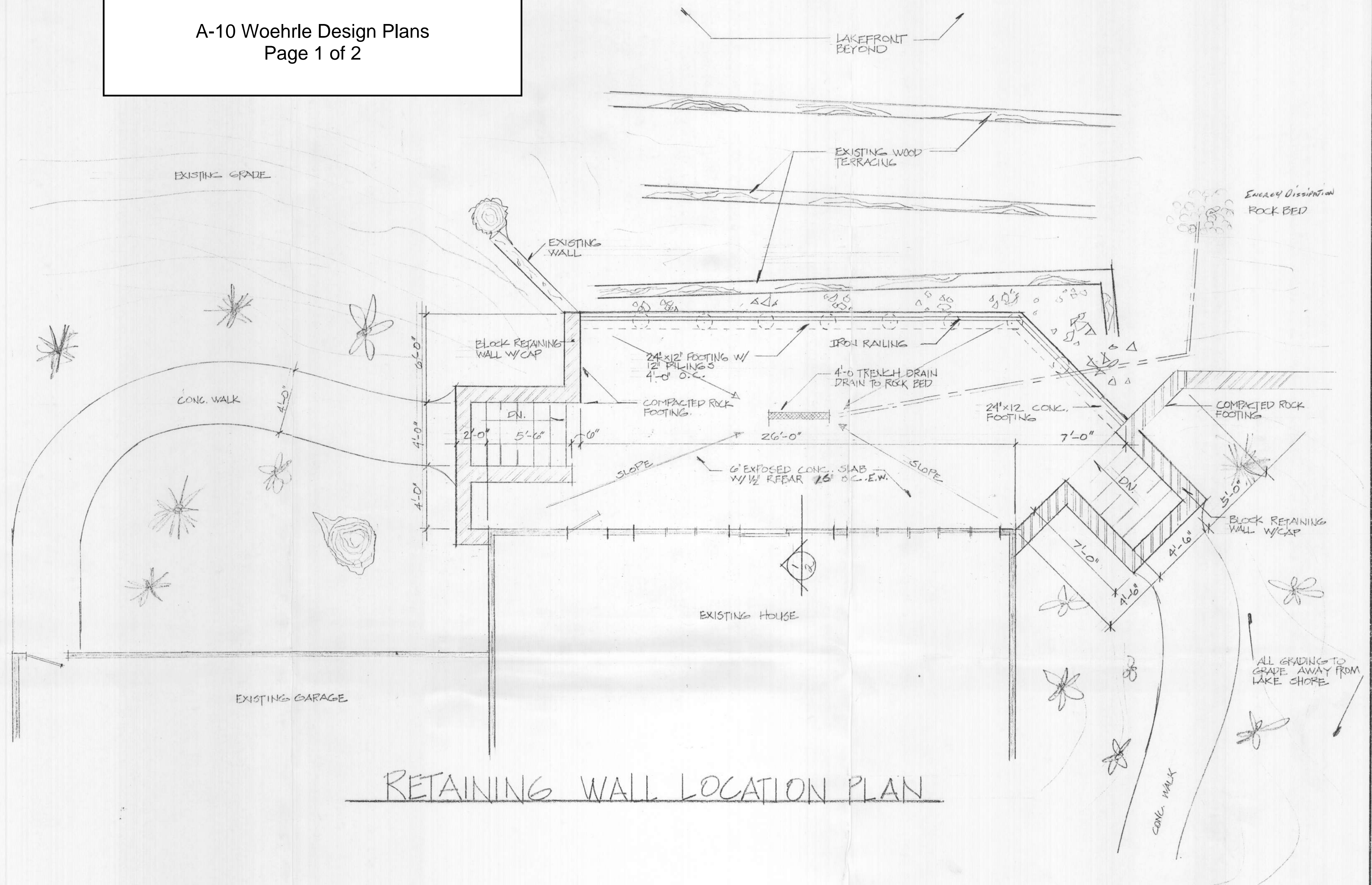




Deck- East View 2



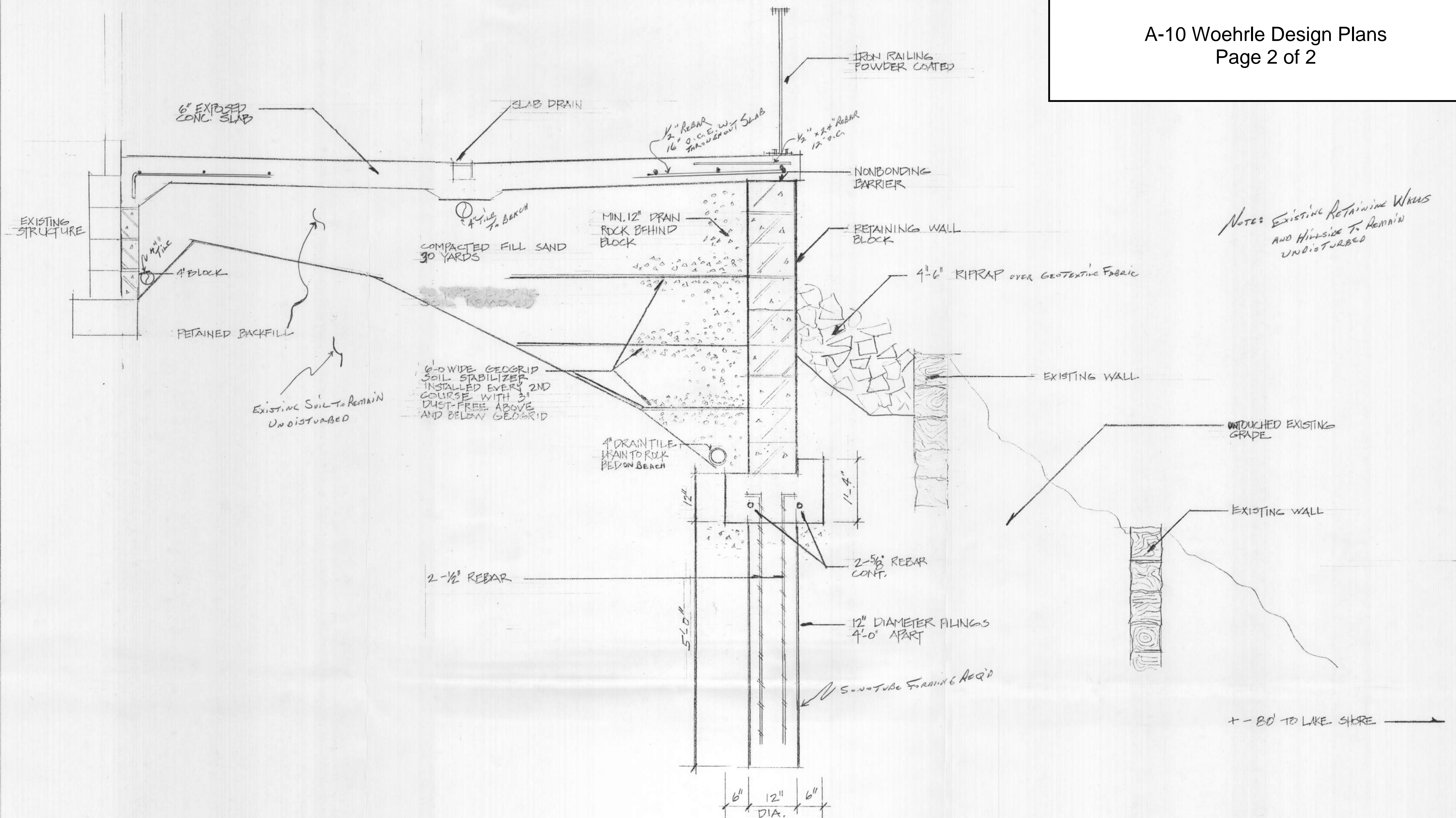
Deck- Foundation



WOEHRLE PLAN

SCALE: 1/4" = 1'	APPROVED BY	DRAWN BY KJK
DATE: 4-21-15		
OWNER: STEPHEN WOEHRLE ADDRESS: 22374 LAKEVIEW HILLS RD. MADISON LAKE, MN		
CONTRACTOR: DENNY LANCE	DRAWING NUMBER 1	

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
Curtiss R. Kloss
Curtiss R. Kloss P.E. No. 14031



RETAINING WALL SECTION

WOEHRLE PLAN		
SCALE: 3/4" = 1'	APPROVED BY	DRAWN BY K.T.K.
DATE: 4-21-15		
OWNER: STEPHEN WOEHRLE ADDRESS: 22374 LAKEVIEW HILLS RD. MADISON LAKE, IN		
CONTRACTOR: DENNY LANCE		DRAWING NUMBER 2

A-11 Design Narrative

Deck Removal and Patio Construction Notes for:

Stephen Woehrle
22374 Lakeview Hills Rd.
Madison Lake, MN 56063

Prior to any construction activities, silt fencing will be installed between the construction area and the hillside. This silt fencing will be maintained until the vegetation in all disturbed areas has been reestablished.

- The existing dilapidated deck will be removed and disposed of properly.
- All of the existing retaining structures and the soils and vegetation on the hillside shall remain undisturbed.
- All existing soils under the existing deck shall remain undisturbed to the extent possible during the construction of the replacement patio retaining wall.
- During the construction of the retaining wall sand and gravel fill will be imported and placed as shown on Drawing No. 2 along with the geogrid soil stabilization materials. Approximately 30 cubic yards of this granular fill is required.
- Drain tile will collect runoff from downspouts and the proposed patio drain and the foundation tile. This moisture will be conveyed to the energy dissipation basin at the bottom of the hillside.
- After completion of the new patio all disturbed areas will be restored to their original condition.

I hereby certify that this narrative was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.

Signature Curtiss R. Kloss

Curtiss R. Kloss P.E. No. 14031